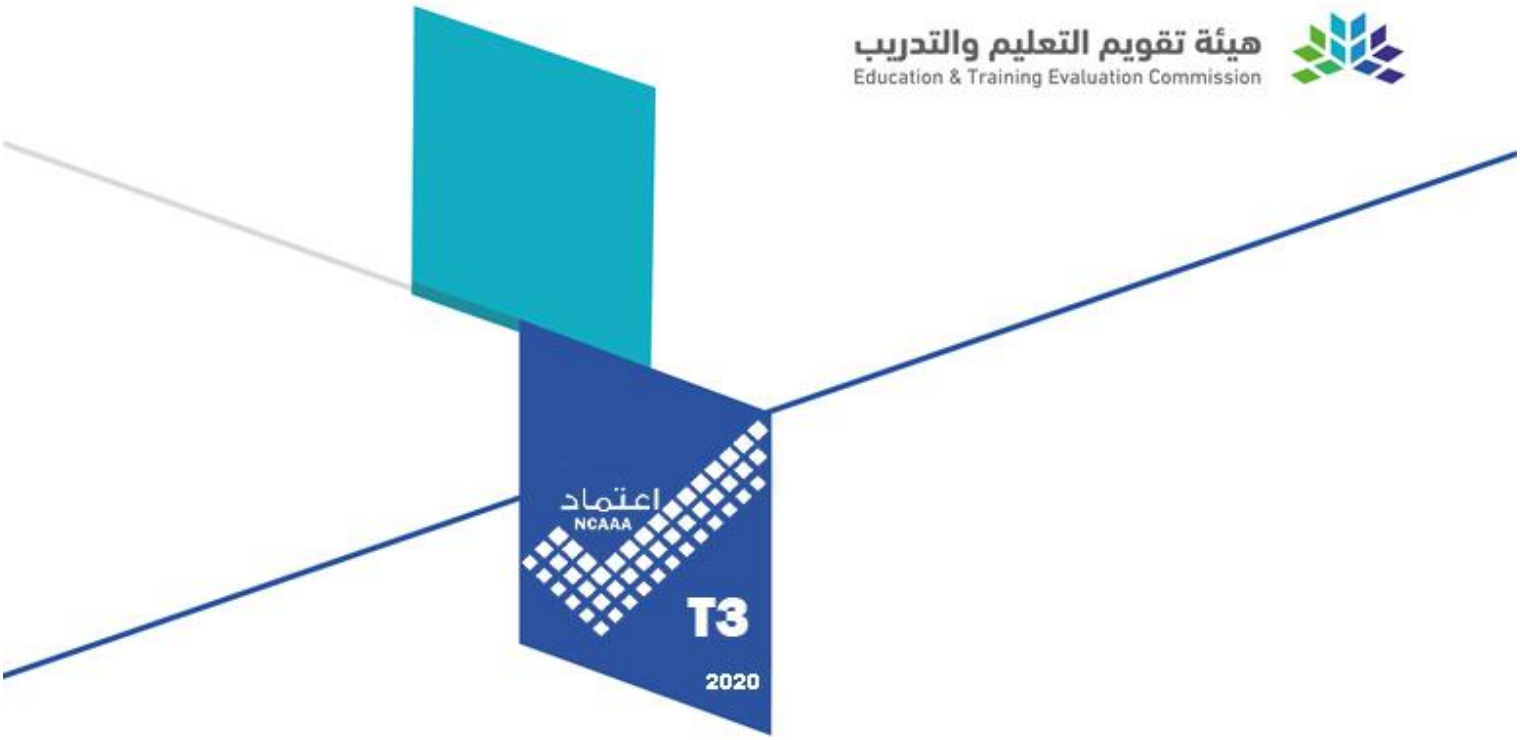
هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Program Specification

Program Name: **Information Technology**
Qualification Level : **B. Sc**
Department: **Information Technology**
College: **College of Computer and Information Sciences**
Institution: **Majmaah University**

Content

A. Program Identification and General Information

1. Program Main Location:

Majmaah University

2. Branches Offering the Program:

- Main Campus of College of Computer and Information Sciences

3. Reasons for Establishing the Program:
(Economic, social, cultural, and technological reasons, and national needs and development, etc.)

- High demand of labor market for qualified graduates in the field of Information Technology.
- Develop and Support the local community in the area of Majmaah City in the field of information technology.
- Connecting the Computer Sciences and Engineering Majors with scientific, administrative and organizing fields.

4. Total Credit Hours for Completing the Program: (134)

5. Professional Occupations/Jobs:

- Cyber Security Project Manager
- Cybersecurity Analyst
- Cybersecurity Consultant
- Security Architect
- Threat Analyst
- Security Specialist
- Incident Responder
- Security Administrator
- Vulnerability Assessor
- Chief Information Security Officer (Ciso)
- Security Auditor
- Penetration Tester
- Cloud Developer
- Cloud Security Engineer
- Front-End & Back-End Developer
- SysOps Administrator
- Development Operations Engineer
- Solutions Architect

7. Major Tracks/Pathways (if any):

Major track/pathway	Credit hours (For each track)	Professional Occupations/Jobs (For each track)
1. **Cybersecurity**	18	• Cyber Security Project Manager • Cybersecurity Analyst • Cybersecurity Consultant • Security Architect • Threat Analyst • Security Specialist • Incident Responder • Security Administrator • Vulnerability Assessor

		• Chief Information Security Officer (Ciso) • Security Auditor • Penetration Tester
2. **Cloud Computing**	18	• Cloud Developer • Cloud Security Engineer • Front-End & Back-End Developer • SysOps Administrator • Development Operations Engineer • Solutions Architect,

7. Intermediate Exit Points/Awarded Degree (if any)**: NA**

Intermediate exit points/awarded degree	Credit hours
1.	
2.	
3.	

B. Mission, Goals, and Learning Outcomes

1. Program Mission:

Prepare qualified national graduates with high skills and enough experience to join and engage intolabor market of the different fields of Information Technology by providing the graduates with thelatest knowledge, advanced skills, and strong moral values to serve the kingdom of Saudi Arabia.

Source: https://www.mu.edu.sa/en/colleges/computer-sciences-and-information-technology-college/134351

2. Program Goals:

The program goals is to produce graduates who can:

PEO1: Practice as computing professionals in areas of IT with an appropriate combination oftheoretical knowledge and hands-on skills.

PEO2: Enhance their skills and master new computing technologies through self-directedprofessional development or post-graduate education.

PEO3: Follow a career path toward leading positions in the IT field.

Source: https://www.mu.edu.sa/en/colleges/computer-sciences-and-information-technology- college/134351

3. Relationship between Program Mission and Goals and the Mission and Goals of the Institution/College.

Program Mission Statement
Prepare qualified national graduates with high skills and enough experience to join and engage into labor market of the different fields of Information Technology by

providing the graduates with the latest knowledge, advanced skills, and strong moral values to serve the kingdom of Saudi Arabia.
Source: https://www.mu.edu.sa/en/colleges/computer-sciences-and-information-technology- college/134351

University Mission Statement
Commitment to providing competitive education and qualitative knowledge production, in order to achieve the university's social responsibility towards sustainable development and quality of life.
Source: https://www.mu.edu.sa/sites/default/files/2020-12/2020%20mu_0_3.pdf

College Mission Statement
To provide distinguished educational programs based on modern developments in computer and information sciences, and to develop highly scientific and academic qualified graduates and successful competitors in the labor market to contribute to the national development.
Source:http://www.mu.edu.sa/en/colleges/computer-sciences-and-information-technology- college/vision-mission-and-objectives-4

Consistency of Mission Statements
The missions of the university, college and department are consistent and they are shown below. The missions are reduced to simpler statements and then mapped to each other in the tables as follow.

The university mission can be simplified as: UM1: Providing competitive education
UM2: Qualitative knowledge production
UM3: Social responsibility towards sustainable development and quality of life

The college mission can be simplified as:
CM1: Provide Distinguished Educational Services
CM2: Follow modern developments of Computer and Information Systems
CM3: Produce highly Qualified graduates who are able to compete in labor market and contribute to National Development

The program mission can be simplified as:
PM1- Prepare qualified national graduates

PM2- Engage into labor market of the different fields of Information Technology

PM3- Provide the graduates with the latest knowledge, advanced skills, and strong moral values to serve the Kingdom of Saudi Arabia

Table 1: College mission statements mapped to University mission statements

	UM1	UM2	UM3
CM1	✓		✓
CM2	✓	✓	
CM3	✓	✓	✓

Table 2: Program mission statements mapped to University mission statements

	UM1	UM2	UM3
PM1	✓		✓
PM2		✓	✓
PM3	✓	✓	✓

Table 3: Program mission statements mapped to College ,mission statements

	CM1	CM2	CM3
PM1	✓		✓
PM2		✓	✓
PM3		✓	✓

Program Educational Objectives
The program goals are to produce graduates who can:

PEO1: Practice as computing professionals in areas of IT with an appropriate combination of theoretical knowledge and hands-on skills.
PEO2: Enhance their skills and master new computing technologies through self-directed professional development or post-graduate education.
PEO3: Follow a career path toward leading positions in the IT field.

4. Graduate Attributes:

Derived from

Program Educational Objectives
The program goals are to produce graduates who can:
PEO1: Practice as computing professionals in areas of IT with an appropriate combination of theoretical knowledge and hands-on skills.
PEO2: Enhance their skills and master new computing technologies through self-directed professional development or post-graduate education.
PEO3: Follow a career path toward leading positions in the IT field.

Graduate Attributes

- Specialists in their field with in-depth knowledge, understanding, skills and values.
- Effectively and respectfully communicate with diverse groups and collaborate with them.
- Develop their skills and master new computing technologies through self-directed professional development.
- Commit to excellence, equity, and sustainability as a professional.
- Approaching positive change in an innovative and creative manner

5.Program learning Outcomes*

Knowledge and Understanding	
K1	An ability to understand a problem and identify the computing requirements appropriate to its solution
Skills	
S1	Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions
S2	Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline
S3	Communicate effectively in a variety of professional contexts
S4	Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing-based systems.
S5	An ability to apply knowledge of computing and mathematics appropriate to the discipline
Values	
V1	Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline
V2	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles

* Add a table for each track and exit Point (if any)

C. Curriculum

1. Curriculum Structure

Table 4: Curriculum Structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Institution Requirements	Required	**14**	12	9.0%
	Elective	**0**	0	0.0%
College Requirements	Required	**10**	53	39.6%
	Elective	**0**	0	0.0%
Program Requirements	Required	**18**	50	37.3%
	Elective	**6 / 32**	18	13.4%
Capstone Course/Project				
Field Experience/ Internship				
Others (Free Elective)			1	0.7%
Total			134	**100%**

* Add a table for each track (if any)

2. Program Study Plan

Table 5: Program Study Plan

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
Level 1	EN111	English 1	R		5 (3,4,0)	College
	IT112	Computer Fundamentals (أساسيات الحاسب)	R		3 (3,1,0)	College
	MH113	Calculus1 (حساب التفاضل والتكامل 1)	R		3 (3,0,1)	College
	SALM--	(أساسيات الحاسب)	R		2(2,0,0)	Institution
Level 2	MH121	Discrete Mathematics (الرياضيات المتقطعة)	R		3 (3,0,1)	College
	EN122	English 2 (لغة إنجليزية 2)	R	EN111	3 (2,2,0)	College
	PHY123	Physics 1 (فيزياء 1)	R		3 (2,2,0)	College
	----	Elective General Course (1) (مقرر إختياري عام 1)	E		2(2,0,0)	Program/Department
Level 3	CS131	Programming 1 (برمجة الحاسب 1)	R		4 (3,2,0)	College
	MH132	Calculus 2 (حساب التفاضل والتكامل 2)	R	MH 113	3 (3,0,1)	College
	STAT133	Probability and Statistics (الإحتمالات والإحصاء)	R	MH 113	3 (3,0,1)	College
	---	Elective General Course (2) (مقرر إختياري عام 2)	E		2(2,0,0)	Program/ Department
Level 4	CS211	Programming 2 (برمجة الحاسب 2)	R	CS 131	4 (3,2,0)	College
	EN212	Technical English 1 (لغة إنجليزية تقنية 1)	R	EN 122	2 (2,0,0)	College

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
	IS213	Fundamental of Database (أساسيات قواعد البيانات)	R	CS 131	3 (3,0,1)	College
Level 5	EN221	Technical English 2 (لغة إنجليزية تقنية 2)	R	EN212	2 (2,0,0)	College
	MH222	Linear Algebra (الجبر الخطي)	R		3 (3,0,1)	Program/Department
	IT223	Visual Programming (البرمجة المرئية)	R	CS131	3 (3,0,1)	Program/Department
	---	Elective Islamic Culture (2) (مقرر إختياري ثقافة إسلامية 2)	E		2(2,0,0)	Program/Department
Level 6	CS231	Data Structures (هياكل البيانات)	R	CS211	3 (3,1,1)	College
	IT232	Selected Topics in Emerging Technologies (موضوعات مختارة بالتقنيات الناشئة)	R		2 (0,4,0)	Program/Department
	IS233	Database Management Systems (نظم إدارة قواعد البيانات)	R	IS213	3 (3,0,1)	Program/ Department
	----	Elective General Course (3) (مقرر إختياري عام 3)	E		2(2,0,0)	Program/Department
Level 7	CS311	Operating Systems (أنظمة التشغيل)	R	CS231	3 (3,0,1)	College
	CS312	Software Engineering (هندسة البرمجيات)	R	CS211	3 (3,0,1)	Program/Department
	IT313	Multimedia & Web Design (الويب وتصميم المتعددة الوسائط)	R	IS213	3 (2,2,0)	Program/Department
	--	Elective General Course (4) (مقرر إختياري عام 4)	E		2(2,0,0)	Program/Department
Level 8	IT321	Data Transmission &Computer Networks (تراسل البيانات وشبكات الحاسب)	R	CS231	3 (3,0,1)	Program/Department
	CS322	Computer Organization (تنظيم الحاسب)	R	MH 121	3 (3,0,1)	Program/ Department
	IT323	Database Lab (قواعد معمل البيانات)	R	IS 213	2 (0,4,0)	Program/ Department
	--	Track Course (مقرر مسار)	E		3	Program/Department
Level 9	CS331	Seminar (ندوة)	R	70 Credits	1 (1,0,0)	College
	IT332	Ethics & Professional Practice (الأخلاقيات والممارسات المهنية)	R	70 Credits	2 (2,0,0)	College
	IS333	Software Project Management (إدارة مشاريع البرمجيات)	R	70 Credits	3 (3,0,1)	College
	IT334	Human Computer Interactions (الحاسب الانسان بين التفاعلية)	R	IT 223	3 (3,0,1)	Program/Department
	--	Track Course (مقرر مسار)	E		3	Program/ Department
Level 10	**IT411**	Summer Training (تدريب صيفي)	R	90 Credits	1 (1,0,0)	Training
	IT412	System Integration (الأنظمة تكامل)	R	CS312	3 (3,0,1)	Program/Department
	IS413	System Analysis & Design (تحليل وتصميم النظم)	R	CS312	3 (3,0,1)	Program/Department

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
	--	Track Course (مقرر مسار)	E		3	Program/Department
	--	Track Course (مقرر مسار)	E		3	Program/Department
Level 11	**IT421**	Graduation Project 1 (مشروع التخرج 1)	R	90 Credits	2 (2,0,0)	Program/Department
	IT422	Information Security (أمن المعلومات)	R	IT 321	3 (3,0,1)	Program/Department
	IT423	Computer Networks Lab (معمل شبكات الحاسب)	R	IT 321	2 (0,4,0)	Program/Department
	IT424	Cloud Computing Fundamentals (أساسيات الحوسبة السحابية)	R	IT 321	3 (3,0,1)	Program/Department
Level 12	**IT431**	Graduation Project 2 (مشروع التخرج 2)	R	IT 421	3 (3,0,0)	Program/Department
	IT432	Systems Administration and Maintenance (نظم وصيانة ادارة)	R	IT 412	3 (3,0,1)	Program/Department
	--	Track Course (مقرر مسار)	E		3	Program/Department
	--	Track Course (مقرر مسار)	E		3	Program/Department

3. Course Specifications

Insert hyperlink for all course specifications using NCAAA template

Course Specifications Hyperlink

4. Program learning Outcomes Mapping Matrix

Align the program learning outcomes with program courses, according to the following desired levels of performance (**I = Introduced P = Practiced M = Mastered)**

Table 6: Program learning Outcomes Mapping Matrix

Course Code/Course Name		Knowledge	Skills					Values	
NCAAA		K1	S1	S2	S3	S4	S5	V1	V2
ABET		SO(8)	SO(1)	SO(2)	SO(3)	SO(6)	SO(7)	SO(5)	SO(4)
EN111	English 1				I				
IT112	Computer Fundamentals (أساسيات الحاسب)	I			I	I			
MH113	Calculus1 (حساب التفاضل والتكامل 1)						I		

Course Code/Course Name		Knowledge	Skills					Values	
NCAAA		K1	S1	S2	S3	S4	S5	V1	V2
ABET		SO(8)	SO(1)	SO(2)	SO(3)	SO(6)	SO(7)	SO(5)	SO(4)
MH121	Discrete Mathematics (الرياضيات المتقطعة)						I		
EN122	English 2 (لغة إنجليزية 2)				I				
PHY123	Physics 1 (فيزياء 1)						I		
----	Elective General Course (1) (مقرر إختياري عام 1)						I		
CS131	Programming 1 (برمجة الحاسب 1)	I	I						
MH132	Calculus 2 (حساب التفاضل والتكامل 2)	P							
STAT133	Probability and Statistics (الإحتمالات والإحصاء)	P							
---	Elective General Course (2) (مقرر إختياري عام 2)								
CS211	Programming 2 (برمجة الحاسب 2)	P	P						
EN212	Technical English 1 (لغة إنجليزية تقنية 1)				I			I	
IS213	Fundamental of Database (أساسيات قواعد البيانات)	I		I		I			
EN221	Technical English 2 (لغة إنجليزية تقنية 2)				P				
MH222	Linear Algebra (الجبر الخطي)						P		

Course Code/Course Name		Knowledge	Skills					Values	
NCAAA		K1	S1	S2	S3	S4	S5	V1	V2
ABET		SO(8)	SO(1)	SO(2)	SO(3)	SO(6)	SO(7)	SO(5)	SO(4)
IT223	Visual Programming (البرمجة المرئية)		P	P		P			
---	Elective Islamic Culture (2) (مقرر إختياري ثقافة إسلامية 2)								
CS231	Data Structures (هياكل البيانات)		I	I				I	
IT232	Selected Topics in Emerging Technologies (موضوعات مختارة بالتقنيات الناشئة)	I				I	I		I
IS233	Database Management Systems (نظم إدارة قواعد البيانات)	P		P		P			
----	Elective General Course (3) (مقرر إختياري عام 3)								
CS311	Operating Systems (أنظمة التشغيل)		P	P					
CS312	Software Engineering (هندسة البرمجيات)		P	P				P	
IT313	Multimedia & Web Design (الويب وتصميم المتعددة الوسائط)		M	M	M				
--	Elective General Course (4) (مقرر إختياري عام 4)								
IT321	Data Transmission &Computer Networks (تراسل البيانات وشبكات الحاسب)	P	P	P					
CS322	Computer Organization (تنظيم الحاسب)		P	P					

Course Code/Course Name		Knowledge	Skills					Values	
NCAAA		K1	S1	S2	S3	S4	S5	V1	V2
ABET		SO(8)	SO(1)	SO(2)	SO(3)	SO(6)	SO(7)	SO(5)	SO(4)
IT323	Database Lab قواعد معمل (البيانات)		P	P		P			
CS232	Programming Language	P	M						
IT471	Track Course Cloud Computing Foundations	P	M	M					P
IT472	Track Course Cloud services management	P	M	M					
IT461	Track Course Applied Cryptography	P				M			
IT462	Track Course Network Security		P						M
CS331	Seminar (ندوة)			I			I	I	
IT332	Ethics & Professional Practice (الأخلاقيات والممارسات المهنية)	P							
IS333	Software Project Management (إدارة مشاريع البرمجيات)					P		M	M
IT334	Human Computer Interactions (الحاسب الانسان بين التفاعلية)		P	P		P			
IT463	Track Course Enterprise Cybersecurity	P					M		M
IT 473	Track Course Cloud Computing Security	M	M						M

Course Code/Course Name		Knowledge	Skills					Values	
NCAAA		K1	S1	S2	S3	S4	S5	V1	V2
ABET		SO(8)	SO(1)	SO(2)	SO(3)	SO(6)	SO(7)	SO(5)	SO(4)
IT474	Track Course Application development in cloud			M					
IT411	Summer Training (تدريب صيفي)				P			P	P
IT412	System Integration (تكامل الأنظمة)		M	M		M			
IS413	System Analysis & Design (تحليل وتصميم النظم)		P	P	P				P
IT 475	Track Course Intelligent Cloud computing	M	M	M		M			
IT476	Track Course Cloud Architecture	M		M					
IT 464	Track Course Software Security Design			M		M			M
IT465	Track Course Security Governance					M			M
IT421	Graduation Project 1 (مشروع التخرج 1)	P	P	P	P			P	P
IT422	Information Security (أمن المعلومات)	M							
IT423	Computer Networks Lab (معمل شبكات الحاسب)			M		M			
IT424	Cloud Computing Fundamentals (أساسيات الحوسبة السحابية)	M	M	M					M
IT431	Graduation Project 2 (مشروع التخرج 2)	M	M	M	M	M	M	M	M

Course Code/Course Name		Knowledge	Skills					Values	
NCAAA		K1	S1	S2	S3	S4	S5	V1	V2
ABET		SO(8)	SO(1)	SO(2)	SO(3)	SO(6)	SO(7)	SO(5)	SO(4)
IT432	Systems Administration and Maintenance النظم وصيانة ادارة					M			
IT 466	Track Course Penetration Testing and Vulnerability Analysis		M	M					M
IT 477	Track Course Cloud Operations	M	M	M					M
IT478	Track Course Advanced Topics in Cloud Computing	M				M			M

* Add a table for each track (if any)

5. Teaching and learning strategies to achieve program learning outcomes

Describe policies, teaching and learning strategies, learning experience, and learning activities, including curricular and extra-curricular activities, to achieve the program learning outcomes.

College of Computer & Information Sciences (CCIS) Majmaah University was established in the academic year 2013-14, The college offers undergraduate programs in a wide range of computer and information science through its four departments, namely: Department of Computer Science, **Department of Information Technology**, Department of Computer Engineering, and Department of Information Systems. Our programs prepare students for career in these disciplines, for careers as scientific and ICT professionals.

In order to meet increasing demand for graduates in computer and information sciences, we have developed robust and modern curricula; established sophisticated facilities; and hired high qualified and motivated faculty. As part of Majmaah University's strategic plan, CCIS puts great emphasis on teaching process with balanced emphasis on research. The college's research activities are directed to be nationally recognized for their quality. Quality and excellences in learning have been some of the values that have guided the Program Review Plan. These factors would contribute to an even stronger learning and teaching environment that is more student-centered and more outcomes-based using the National Quality Framework and NCAAA as the main blueprints.

Description of process for investigation and preparation of report on this standard.

The preparation of this section of the report involves a number of steps, including:

- A member of the Program NCAAA team was assigned to this standard.
- Regular meetings were carried out with the program chairman (Dean) and faculty & staff members to collect information about learning and teaching;
- Analysis of data including, surveys, interviews, statistical data sets, reports, and other resources related to the quality of teaching and learning.
- Identification of key performance indicators for learning and teaching;
- Compiling the self-evaluation scales for learning and teaching.
- Writing the final report concerning the learning and teaching standard.

Table 7: Program learning outcomes (SO) Teaching Strategies, assessment Method.

NCAAA Category	NCAAA Code	SO Descriptor	Teaching Strategies	Assessment Methods
Knowledge	K1	An ability to understand a problem and identify the computing requirements appropriate to its solution	Classroom Teaching	Class Test, Mid Exam, Final Exam
Skills	S1	Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions	Classroom Teaching	Class Test, Mid Exam, Final Exam
	S2	Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in thecontext of the program's Discipline	Mini Project, Lab Exercises	Lab Based Assignments, MiniProject
	S3	Communicate effectively in a variety of professional contexts	Oral /Written Communication, Seminar	Group Assignments, Mini Project
	S4	Identify and analyze user needsand to take them into account in the selection, creation, integration, evaluation, and administration of computing-based systems. [IT]	Mini Project, Graduation Project, Lab Exercises	Case Study Implementation/ Laboratory /Mini project
	S5	An ability to apply knowledge of computing and mathematics appropriate to the discipline	Classroom Teaching	Class Test, Mid Exam, Final Exam
Val	V1	Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline	Mini Project, Graduation Project, Lab Exercises	Oral or Written Communication, Seminar

	V2	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles	Classroom Teaching, Graduation Project	Class Test, Mid Exam, Final Exam

6. Assessment Methods for program learning outcomes.

Describe assessment methods (Direct and Indirect) that can be used to measure achievement of program learning outcomes in every domain of learning.

SO(PLO) assessment process

The assessment of student outcomes is performed every semester through direct and indirect assessments. All student outcomes are considered to be attained when the average score reaches 70 % and above .Direct assessment:

- The assessment is performed on the defined assessment tools for all the courses. The assessment tools are provided in the course portfolio.

Indirect assessment:

- This is mainly used as a supplementary assessment measure and is done through the following surveys:
  - Course surveys
  - Summer internship survey
  - Graduation project survey
  - Exit survey

Figure1 1, illustrates various direct and indirect assessment methods

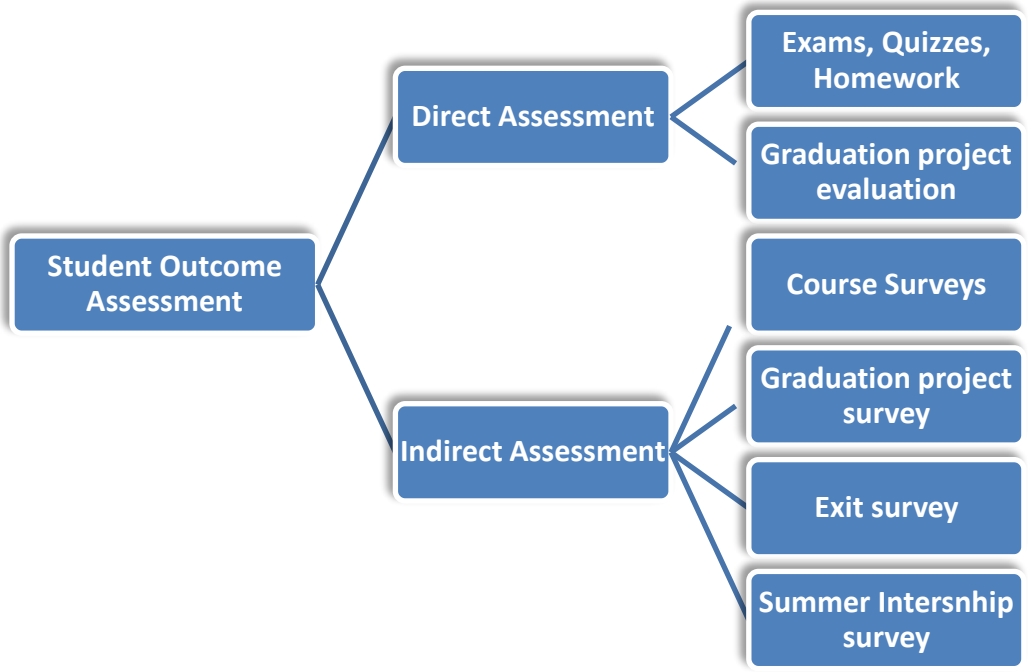


Figure1 : Student outcomes assessment

Table 8: 8, describes the instruments that are used in direct and indirect assessment of student outcomes.

Table 8: Students outcomes assessment tools – Direct and Indirect

	Assessment Tool	Frequency	Media	How Collected	Source	Collected by	Evaluated by
Direct Assessment	Mid exam, Class test, Quiz, Assignment, Final Exam	Every Semester	Course Assessment Report	Electronic	Faculty Members	Quality Unit	Measurement and Evaluation Unit
Indirect Assessment	Course Surveys	Every Semester	Survey	Paper / Electronic	Faculty Members	Faculty Members	Measurement and Evaluation Unit
	Exit Surveys	Every Semester	Survey	Paper	Faculty Members	Quality Unit	Measurement and Evaluation Unit
	Graduation Project Surveys	Every Semester	Survey	Paper	Faculty Members	Graduation Project Coordinator	Measurement and Evaluation Unit
	Summer Internship Surveys	Every year	Survey	Paper	Summer Training and Employability Unit	Summer Training and Employability Unit	Measurement and Evaluation Unit

Direct Assessment

In the IT program, each course targets a subset of the student outcomes with a certain percentage. These outcomes are directly assessed in every course using pieces of student work (questions in exam, homework, project, etc.,) Specific questions from the desired assessment tools are designed to assess a targeted outcome in the course. The designated level of performance (60% and above) indicates the achievement of SOs in the course.

In every course, the faculty member is expected to assess the achievements of the relevant student outcomes in the course. The final assessment is preferably done close to the end of the semester.

The faculty member prepares a direct assessment report and evaluates the student outcome achievement in each course. If the assessment revealed any weaknesses in a specific student outcome, the faculty should identify the cause and propose corrective action plan that can be implemented in the course or in one of the prerequisite courses in order to improve that specific outcome achievement in the future.

The proposed corrective actions are implemented in the following semester and their impact on the specific outcome achievement shall be assessed.

The measurement and evaluation unit aggregate the outcomes achievement in all courses in IT program and computes the average score. If an outcome achievement appears to be unsatisfactory, the faculty member/department propose corrective action plan at the course level, the curriculum level, or both.

Different courses contribute to a specific outcome achievement at the program level depending

on their number of credit hours and the percentage by which they target that specific outcome.

The student outcomes' assessment process is conducted every semester.

Each course instructor provides direct assessment reports and outcome evidences:

- Brief description of the student works used to measure the achievement of student outcomes (assignments, projects, exams, etc.),
- A description of which specific work is meant to assess which outcome.
- Student outcomes achievement.
- Analysis of the student outcomes achievements and identifying strengths and weaknesses.
- Proposals to fix any identified weaknesses to be applied during the following semester.
- Samples of students' work.

The measurement and evaluation unit reviews the provided material and checks:

- to what extent did the students demonstrate they attained every outcome,
- whether the work evidence is appropriate for the assessment and
- the adequacy of the improvement proposals with regards to the identified improvement area.

The measurement and evaluation unit then writes a report to the quality unit with their findings. The findings are processed by the quality unit and forwarded to department.

The measurement and evaluation unit keeps track of the improvement proposals and checks the achieved improvement at the end of the following semester.

Indirect Assessment

The indirect assessment consists of the following processes:

- Course survey
- Summer internship survey
- Graduation project survey
- Exit survey

The surveys are described in the following sections.

Course survey

Faculty are required to conduct course survey to assess the course learning outcomes(CLOs) achievement from the students' point of view.

Faculty members need to analyze the survey data in order to assess the achievement of the CLOs of their courses and consequently the student outcomes. The students' perception

should also be discussed in the light of the direct assessment results obtained from students' work. Faculty write an indirect assessment report, where they identify issues and their causes (if any) and suggest corrective actions or improvements to be applied in the following semester. The assessment report is submitted to the measurement and evaluation unit to check adequacy of the proposed actions and follow up their implementation. All courses' surveys and their results are available with the faculty members.

Summer internship survey

After the students finished their summer internship, they are asked to fill in a survey to assess their summer internship experience and outcomes. The measurement and Evaluation unit analyses the survey data, where in which corrective actions may be suggested.

Graduation project survey

After the students present their graduation projects, they are asked to fill in a survey to assess their project experience and outcomes. The graduation project coordinator analyzes the survey data and submits a report to the measurement and evaluation unit, where in which corrective actions may be suggested.

Exit survey

An exit survey is filled in by the graduates at the end of their graduation semester. The exit survey contains questions that directly target every one of the student outcomes. At the end of every semester, the survey data are analyzed by the measurement and evaluation unit and a report identifying weaknesses is produced and submitted to the department.

Based on the students' outcome direct and indirect assessment reports, the assessment will compute the program outcomes achievement at the program level. In addition to keeping track of the identified weaknesses at the course levels, the measurement and evaluation unit will identify weaknesses that may need a global corrective action at the program level. It may propose corrective actions to the accreditation and quality unit and department council. Those actions may relate to the curriculum by changing some courses or adding new ones in order for the IT program to better achieve the student outcomes.

Frequency of Assessment

The assessment frequency is detailed in Table 9: below

Table 9: Assessment frequency

Formative	Every semester
Summative	
Course survey	

Graduation project survey	
Exit survey	
Summer internship survey	Every year

Assessment Process

The assessment and evaluation of SOs of an individual course during the semester based on data collection is explained in detail.

1. Data Collection

    a) The direct assessment is evidence of student outcome. It is tangible, visible, measurable and tends to be more compelling evidence of exactly what students have and does not learned. The evidence of students' performance to determine what they've learned is available in the course portfolio.
    b) Indirect assessment evidences tend to be composed of proxy signs that students are probably learning. An example of indirect evidence is a survey through which asking students their self-report that what they have learned. This is evidence that students probably are learning what they report to have learned, but it is not as compelling as a faculty member looking at students' work. It is not uncommon in students' self-reports to either inflate or undervalue what they have learned.
    c) Course assessment report is a consolidated evidence by the instructor of each and individual section. It contains the data collected from direct and indirect assessments, which were practiced during semester. The information is gathered using several instruments at regular intervals. For example, an exit survey is a data collection instrument that is used to gather information about the graduating students' opinion to measure the SOs achievement. These instruments are described in detail at later sections.
2. Data Preparation: The data preparation involves validation and transformation to make it ready for use in evaluation of SOs. For example, the paper-based survey data is converted to electronic format. The illegible, incomplete, erroneous or duplicate submissions are discarded whenever necessary.

Evaluation Processes

1. Data Interpretation: Metrics are used to summarize data and its interpretation based on the points of interest. For example, the survey responses are used to calculate weighted averages scored of SOs.

2. Attainment Evaluation: The attainment of evaluation for all the SOs are measured in this step. For example, the verification of the SO achievement from various data sources with reference to the threshold values (EE-Exceeding Expectation, ME-Meeting

Expectation, PE-Progressing towards Expectation & DNME-Does Not Meet Expectation) are carried out.

3. Issue Analysis: Wherever the evaluation of targeted SOs are not achieved, an issue based deeper analysis is conducted. For example, reviewing faculty course assessment reports, discussing with faculty and students to determine underlying issues for poor achievement.

4. Improvement plan: An action plan is developed to remedy the identified issues and recommended implementation over the issue.

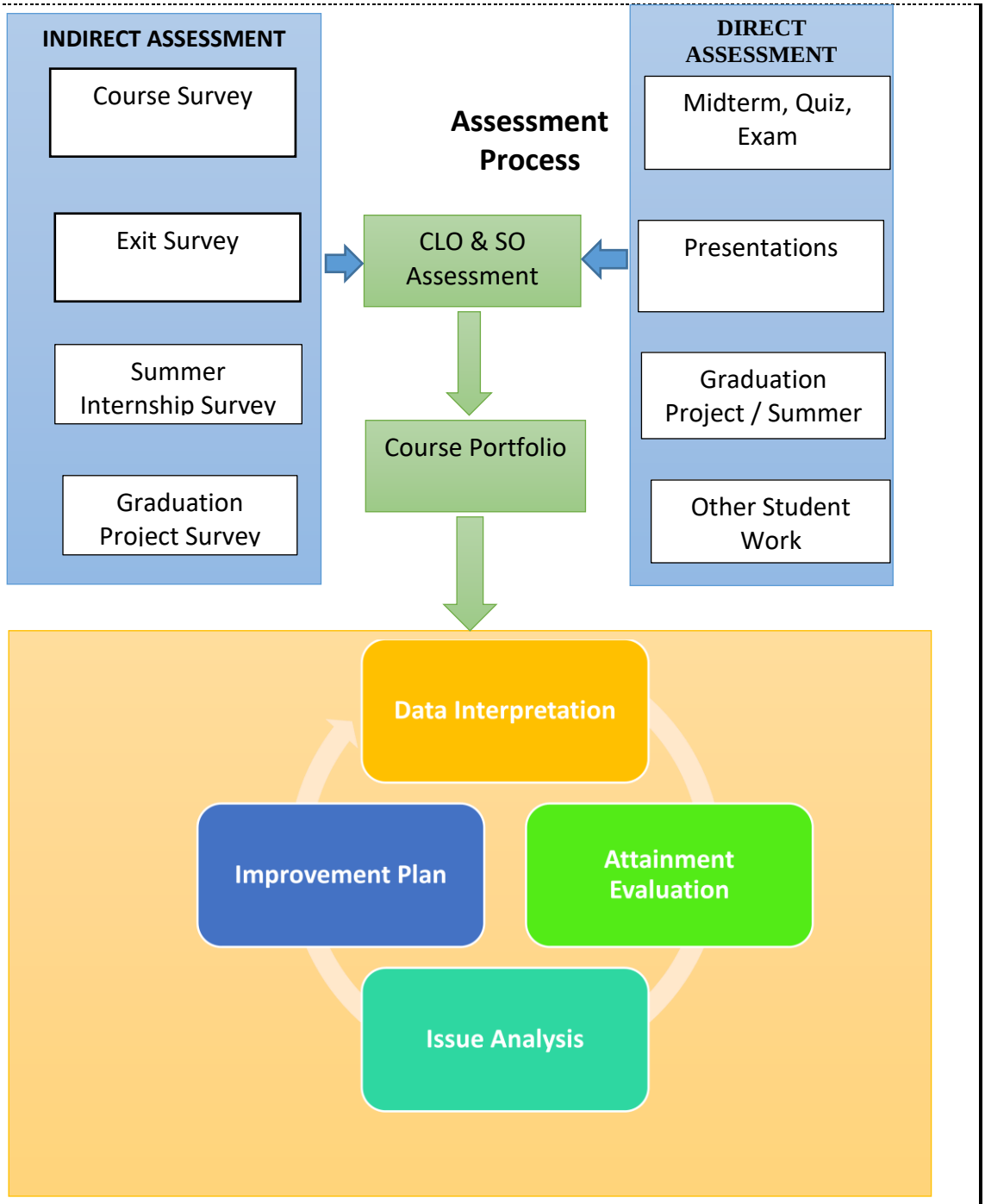


Figure 2: Assessment and Evaluation Processes

Expected levels

The expected levels of satisfaction are defined as follows:

For direct assessment:

For direct assessment, when evaluating an outcome achievement using students' work, the evaluated outcome is considered to be attained, if the student achieved a score of 60% or above in the corresponding work.

Five levels of satisfaction have been defined:

- Excellent is given to a student whose score in a specific outcome is above 90%.

- Very Good is given to a student whose score in a specific outcome is between 80% and
- Good is given to a student whose score in a specific outcome is between 70% and 80%,
- Fair is given to a student whose score in a specific outcome is between 60% and 70%,
- Unsatisfactory is given to a student whose score in a specific outcome is 60% or lower,

For indirect assessment:
For indirect assessment (surveys), an outcome is considered to be attained if the student answer to the corresponding question is "Agree" or "Strongly Agree". Five levels of satisfaction have been defined:

- Excellent: corresponds to Strongly Agree in a specific outcome.
- Very Good corresponds to Agree in a specific outcome.
- Good: corresponds to Neutral in a specific outcome.
- Fair: corresponds to Disagree in a specific outcome.
- Unsatisfactory: corresponds to Strongly Disagree in a specific outcome.

For a whole course:
Four levels of outcome achievement at section or course level have been defined. For a section or whole course, the final judgment of the attainment of the student outcomes by all students enrolled in a course or a section is evaluated as follows (Table 10):

Table 10: Assessment Attainment Level

Exceeds Expectations (EE)	Meets Expectations (ME)	Progressing Towards Expectations	Does Not Meet Expectations (DNME)
>=80% or more of students are achieving the satisfactory level or above	>=70% and <80% of students are achieving the satisfactory level or above	>=60% & <70% of students are achieving the satisfactory level or above	< 60 % of students are not achieving the satisfactory level

D. Student Admission and Support:

1. Student Admission Requirements

In general, students applying to the college are centrally admitted by the deanship of admission and registration to the preparatory year. The University council decides the number of admitted students for each upcoming year according to the recommendation of the college council, whichin turn take recommendations from the department council.

For a student to be admitted to the College of Computer and Information Sciences, the following conditions must be satisfied:

- The student must have obtained a recent Secondary School Certificate (not earlier thanfive years), or its equivalent.
- The student must be of Saudi nationality. Non-Saudis are treated in accordance withMajmaah University regulations of international students scholarship.
- The student must have good behavior and conduct.
- The student must be physically fit and in a good health for the purpose of study.
- Admission is based on a combination of the student score in the General Certificate of Secondary Education (GCSE), known as THANAWIA, and scores in two standard national exams organized and administered by the "National Center for Assessment in Higher Education" (QIYAS). These two Exams are:
  - General Aptitude Test, known as QUDRAT.
  - Scientific Track Admission Test, known as TAHSEEL.

If all the above conditions are satisfied, admission is granted to the preparatory year. Students who have an initial acceptance to the college before the preparatory year must maintain a GPA not less than 3.0 / 5 in order to be eligible to continue in the college.

After completing the preparatory year, students are distributed to the various programs of the university according to three criteria: their preference, GPA from the preparatory year, and the capacity of each program.

2. Guidance and Orientation Programs for New Students

- Orientation day is arranged for the newly admitted students in Level 3 ,to explain theimportant aspects of the university, college and the department and provide him/her with needed information to understand the program and department objectives..
- Workshops offered by the Different Units.

Academic Advising - Freshmen students are considered under the academic advisingof the Academic Advising unit until they join a program. Once joined to one of the available programs, the student is assigned to a faculty member of the same programas an advisor.

3. Student Counseling Services
(academic, career, psychological and social)

A full faculty member is assigned to each student for the duration of the student's enrollment with the program. Each faculty member is asked to define advising hours and announces them to the students. Freshmen students, however, are considered under the academic advising of the Academic Advising unit until they join a program.Once joined to one of the available programs, the student is assigned to a faculty member of the same program as an advisor.

Role of the Academic Advising Unit

The goal of academic advising unit is to connect faculty members with students through following-up, guidance and observation of students academically. Thisprocess can be achieved through:

1. Welcoming the new students in their first day of the academic year, and notifying them of the University and College systems and the environments.
2. Distributing the students according to their specialties all over the college staff.
3. General supervising of Academic advisors and following up what are raised tohim from student cases.
4. Resolving the cases that are raised to him from academic advisors or raisingthem to the academic vice dean or the dean according to the situation.
5. Organizing events and meetings with students at various levels related toacademic advising.

Enrollment Advising

The academic advising unit is primarily responsible for advising students prior to the start of each academic year. The unit allocates groups of students to faculty members,which, in turn, is recorded into the university's electronic registration system, EduGate. The student can see his/her advisor's name in the electronic registration system, and the advisor has access to the records of his/her advisees through the EduGate portal.

Academic advisors

Academic advisors are meant to provide educational counseling for students. The academic advisor's primary responsibility is to evaluate the student's study plan to ensure it will satisfy university requirements while it meets each student's specific needs. To be effective, the advisor must recognize that each student has different abilities, interests, aspirations, needs, experiences, and problems so that his/her approach in dealing with students can be different from one to another. Academic advising cannot, therefore, be a mechanical, routine matter. To fulfill this requirement,the general advising duties can be stated as follows:

1. Students are encouraged to meet with their academic advisors regularly during thesemester for consultation and guidance. The relation between academic advisors and students can be summarized as follows:

a. Revising and studying the student academic register, including the courses studiedand his academic plan and its data. This is to ensure that each student comply withthe study plan he/she enrolled in and to avoid delays in graduation
b. Helping student in choosing the courses among his academic program.
c. Following up the student continuously, and resolving the problems that mayappear during his study.
d. Raising statistical reports about the department students to the department chief.
e. Preparing a complete file for each student advised by him, including his academicschedule, transcript, study plan and attendance during current semester.

2. Academic advisors are requested to conduct group meeting with all students at thebeginning of each semester.
3. Advisors should regularly follow up student 4 times during the term to check his/her attendance and academic progress rate during fifth, eighth, eleventh andfourteenth weeks.
4. Students can meet his advisors in other times during the semester to discuss any academic-related issues that may arise and be of concern to the study progress ofany student.

After assigning an academic advisor for each student in the program, the student is required to meet his/her academic advisor for the purpose of registration based on his/her study plan, addressing any academic or career issues, and meeting graduation requirements. Each student has his/her own study plan based on the progress in his/heracademic study and his/ her choice of the program's tracks. The student is required to maintain an updated study plan each semester to help him/her in choosing appropriate courses for registration in the following semester and to easily follow up the academicprogress. The study plan is available for both students and academic advisors .

The student can add/drop courses during the first week of each semester after obtaining the permission from the academic advisor. The student is allowed to registerup to 18 credit hours per semester but not less than 12. Exceptions to this rule can be made after getting the approval of academic advisor and Department Chair.

Career Advising

Career advising is provided to the students through academic advisors, industry/governmental affiliates, experts in the fields, etc. and organized by the Academic Advising Unit. The college is to start holding an annual event starting fromthis academic year (2016/2017) for the purpose of providing potential graduates with different career paths within their business field, the basic rules of choosing career, identifying and comparing various job opportunities, preparing well for personal interview and improving interview skills.

4. Special Support

(low achievers, disabled, gifted and talented)

The performance of the student in his/her courses is evaluated by the instructor using course assessment tools such as final exams, midterms, quizzes, homework, projects,reports etc. that fulfill the course/student outcomes. The instructors are

invited to submit list of students who suffer difficulties in their classes to academic advisors. This will help the advisors to present assistance to those students in order to improve their performance in the class. In addition, students are encouraged to stop by their instructor's office during the office hours to discuss with them any concerns regardingthe course. Special Care of low achievers, disabled, gifted and talented students by Academic Advisor.

E. Teaching and Administrative Staff

1. Needed Teaching and Administrative Staff

Table 11: Needed Teaching and Administrative Staff

Academic Rank	Specialty		Special Requirements / Skills (if any)	Required Numbers		
	General	Specific		M	F	T
Professors	IT	Cybersecurity		1	1	2
Associate Professors	IT	Cybersecurity		2	2	4
Assistant Professors	0	-		0	0	0
Lecturers	IT	-		1	0	1
Teaching Assistants	IT	-		1	1	2
Technicians and Laboratory Assistants	IT	-		1	1	2
Administrative and Supportive Staff	-	-		0	0	0
Others (specify)	-	-		0	0	0

2. Professional Development

2.1 Orientation of New Teaching Staff

Describe briefly the process used for orientation of new, visiting and part-time teaching staff

- Faculty orientation handbook is sent to the new staff before arriving.
- Orientation day is arranged for the new staff to explain the important aspects of the university, college and the department and provide him/her with needed information tounderstand the program and department objectives.
- Workshops offered by the university for new staff.

2.2 Professional Development for Teaching Staff

Describe briefly the plan and arrangements for academic and professional development of teaching staff (e.g., teaching & learning strategies, learning outcomes assessment, professional development, etc.)

- Workshops for various aspects of academic development and quality assurance are frequently conducted over the academic year.
- Conducting Seminar lectures and colloquium.
- Attending national and international scientific conferences.
- Research Publications.
- Membership in IEEE, ACM, etc…
- Membership in Editorials in indexed journals

- Inviting Experts and professors

F. Learning Resources, Facilities, and Equipment

1. Learning Resources.

Mechanism for providing and quality assurance of learning resources (textbooks, references and other resource materials, including electronic and web-based resources, etc.)

- Under the supervision of the Deanship of Students' Affairs, the university provides aid to the students under the Students Fund Board through several programs; examples are students loans, students employment, and academic text books.
- All library needs (textbooks, e-books, journals, publications, periodicals, databases, etc.) are available through the central library.
- In addition, 10 laptops and 6 iPADs are available in innovation center to access **Saudi Digital Library**(SDL) containing access to several e-text booksand journal papers.
- In addition, the college has provided (286) textbooks serving (29) titles from our offered courses.
- **Student Information System (EduGate)-**The Deanship of Admission and Registration provides an electronic services portal (EduGate) for students andfaculty, through which, students can perform online registration, review theiracademic progress, view and print transcripts/grades, and monitor their absence rates. While instructors can monitor students under their academic advising, view their academic progress and results, insert marks and absencesfor students in their class, edit self-profiles, view their academic schedules.

Learning Management System – BLACK BOARD-The Deanship of E-Learning and Distance Learning is providing a learning management system BLACK BOARD to manage courses electronically and provide other possible learning opportunities to the students. It provides not only an easy way for course material management, but also a way of communication between faculty, colleagues, and students through virtually any device connected to the Internet, anytime, anywhere.

2. Facilities and Equipment

(Library, laboratories, medical facilities, classrooms, etc.).

The Information Technology Department's faculty offices are in the first floor which isshared with the other departments as well; Information Technology, Information Systems,and Computer Engineering departments. All other infrastructure (including classrooms, labs)are distributed among the rest of the building, which are also accessible to all departments. Attached to the Dean's office is a meeting room enough to hold up to 25 people and equippedwith a modern teleconference/presentation facility to conduct national and internationalmeetings and/or interviews.

In addition to the above, the building is equipped with four e-classrooms used to conduct seminars/workshops and/or classes between both male & female sides and equipped with

two TV and camera sets and two desktop sharing screens with fast meeting capability. Also, a telepresence room attached to the Dean's office for meetings and interviewing new faculty members. All internal communication is managed through IP phones. The building is equipped with (63) ready-use IP phones, but only (45) are used by faculty, TAs, and administrative staff.

A. Offices, Classrooms and Laboratories

1. Offices (such as administrative, faculty, clerical, and teaching assistants) and any associated equipment that is typically available there.

The department main facilities reside in the first floor, which comprises the department head's office, department secretary, ten offices (four faculty, four TAs, and 2 shared offices for lecturers), one shared meeting room equipped with presentation facilities and enough to hold up to nine people, all offices are around 9´×9´ in size, equipped with large working deskarea, book shelves, folders cabinet, chairs to conduct students' meetings, desktop (or laptop) computer with regular software installed (Windows, MS Office, etc.), office stationeries (messages keeper, stapler, puncher, pen holder), IP phone, wired and wireless Internet access,and air-conditioned. Most offices are also equipped with desk-size printers, in addition to a large shared networked printer in the same floor. All offices have access to fresh air and daylight. In addition, there are two large shared offices in the female side (33´×16´ and 23´×23´) for TAs (7 and 4 TAs, respectively).

Other shared resources are spread over the lobby and fourth floor include: six large displays for important announcements, rest area, general meeting room that can hold up to 90 people, prayer room, recreation area, and cafeteria. All the shared resources are air-conditioned andhave access to fresh air and daylight.

2. Classrooms -There are total twenty-three classrooms (12 for the male side and 11 for the female side) to conduct lectures distributed over the second and third floors shared between all the departments. Classrooms are of various sizes and capacities; they can accommodate students ranging from (15) up to (38) students each. All classrooms are equipped with presentation podiums, wired (dedicated to the podiums) and wireless Internet access, single students' chairs (right- and left-handed), and fully air-conditioned. All classrooms have access to fresh air and most of them have daylight access.

Four of the above classrooms are e-learning classrooms used mainly to conduct faculty seminars, general assembly meetings between male & female sections, and is used to communicate lectures to the female side in some courses. Classrooms projection walls are painted with ideal paint to make the wall interactive.

3. Laboratory facilities including those containing computers (describe available hardware and software) and the associated tools and equipment that support instruction. Include those facilities used by students in the program even if they are not dedicated to the program and state the times they are available to students.

Five laboratories equipped with dual operating systems (Windows and Mac) are being used to conduct tutorials, experiments and/or lectures. Some of these labs are for special courses only while the others are for general programming courses. In addition to five labs available in the female side for certain courses that require lab work.

Currently, the IT program has full access to Digital Forensics, Network, Computer Engineering, Database, and Operating Systems Labs totaling a capacity of (108) seats in addition to instructors' seats and a total of (121) seats in the female side in addition to instructors' seats. In addition, the innovation center is accessible to students for discussions

and for using e-library from iPADs.
Some of the laboratories are utilized for research purposes as well as educational courses. They contain all necessary equipment, hardware, and software needed for faculty to conductresearch in different areas, including:
- Digital Forensics, Cyber Security,Cloud Computing,Image Processing ,Network Security etc.
B. Computing Resources
A total of (8) servers, (13) switches, (2) core switches, (2) routers are used to manage the whole network of all labs, administrative staff offices, and faculty offices totaling (504) Ethernet nodes. In addition, a total of (28) wireless access points are distributed all over theCCIS facility as an open source for the students to access the Internet using their own usernames and passwords.

3. Arrangements to Maintain a Healthy and Safe Environment (According to the nature of the program)

- Use And Update Labels and Signs One way of adhering to health and safety procedures, apart from the obvious aspect of providing safe and protective tools and equipment, is to use labels and signs.
- Provide Protective Equipment and Safe Tools.
- Implement Safety Protocols.
- Train The Staff Frequently .
- Encourage Open Communication

G. Program Management and Regulations

1. Program Management

1.1 Program Structure

(including boards, councils, units, committees, etc.)

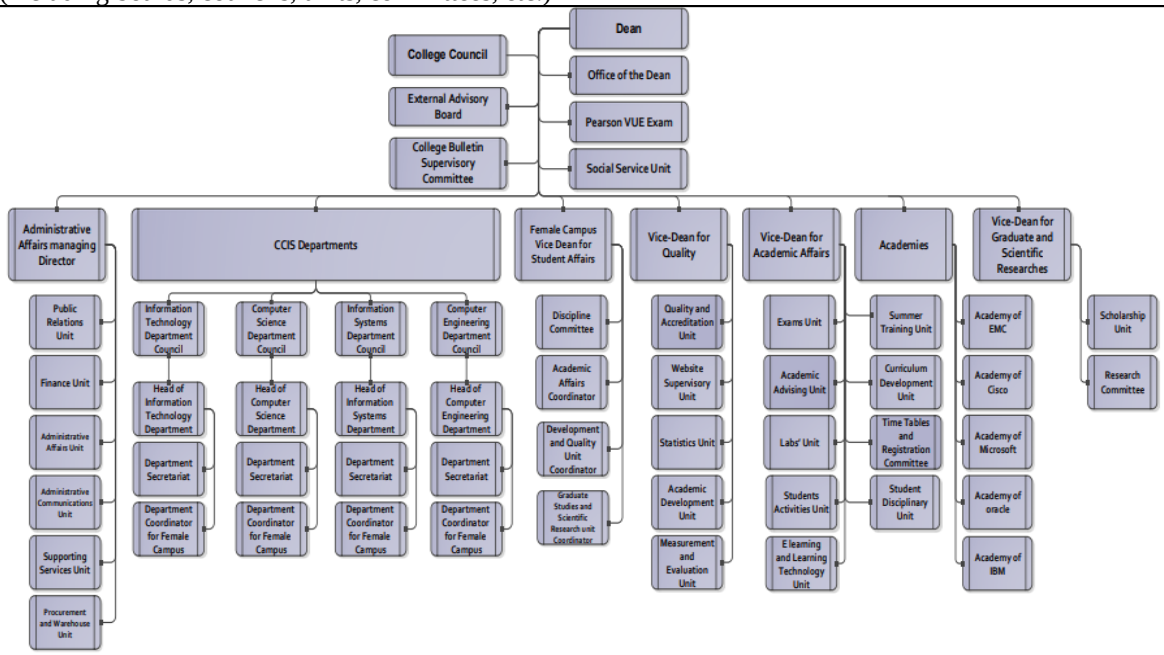


Figure 3: Program Structure

1.2 Stakeholders Involvement

Describe the representation and involvement of stakeholders in the program planning and development. (Students, professional bodies, scientific societies, alumni, employers, etc.)

External and Student Advisory Boards

The department created the External Advisory Board (EAB) (Table), including representatives from academia, employers of the program alumni and industry. The department also has a Student Advisory Board (SAB) comprises of the department head, the Faculty Coordinator and several junior and senior Students Below is the current composition of each advisory board.

Table 12: External Advisory Board Members

Dr. Mohammed bin Abdulrahman Al-Shahri	Dean of the Faculty of Computer Science and Information Sciences
Dr. Majid bin Abdullah AlOwaidi	Head of Information Technology
Dr. Talal bin Abdi Al Harbi	Undersecretary of the Faculty of Computer Science for Educational Affairs
Dr. Hani bin Mohammed Al-Zaid	Deputy Director of the National Center for Information Security King Abdul Aziz City for Science and Technology
M. Abdulrahman bin Abdulaziz Al-Wintery	CEO of Outstanding Solutions and Board Member of the Saudi Federation for Cyber Security and Programming

M. Yasser Bin Najib Al-Suwailem	Vice President, Cyber Security Sector, STC,KSA

In addition, the department composed a student advisory board where students of different levels of the program are represented. The following table (13) shows the current student advisory board:

Table 13: Student Advisory Board

5	IT	411100055	Abdulaziz Ahmed Al-Khayal	.1
3	Prep	421103374	Mohammed Al-Dakhil	.2
8	IT	382105449	Yaqoub Yusuf Hassan Al-Ainiyah	.3
8	CS	381101725	Khalid bin Musa bin Abdullah Al Musa	.4
7	CS	391203033	Hessa Bint Melifi Al-Mulaifi	.5
7	IT	391202610	Ghalia Bint Muhammad Al-Mutairi	.6
9	CS	381200262	Raneem bint Fahd Al-Awlah	.7
6	IT	392205288	Maram bint Majid bin Talib	.8

The role of each of these constituents and advisory boards consists in the establishment and in the continuous assessment the program program's educational objectives and student outcomes. Both of the external advisory board and the student advisory board take part in the process of establishing and reviewing the Program Educational Objectives and the program Student Outcomes. The university administration is a major player in the life of the Information Technology Department and program since is provides the department with financial support and adequate facilities to ensure the achievement of the program objectives. Even though the university administration is not directly involved in the process of establishing and reviewing the program objectives, these objectives have been elaborated to serve the university mission through the department and college missions as shown in above.

2. Program Regulations

Provide a list of related program regulations, including their link to online version: admission, study and exams, recruitment, appeals and complaint regulations, etc.)

In general, students applying to the college are centrally admitted by the deanship of admission and registration to the preparatory year. The University council decides the number of admitted students for each upcoming year according to the recommendation of the college council, which in turn take recommendations from the department council.

After assigning an academic advisor for each student in the program, the student is required to meet his/her academic advisor for the purpose of registration based on his/her study plan, addressing any academic or career issues, and meeting graduation requirements. Each student has his/her own study plan based on the progress in his/her academic study and his/ her choice of the program's tracks. The student is required to maintain an updated study plan each semester to help him/her in choosing appropriate courses for registration in the following semester and to easily follow up the academic progress. The study plan is available for both students and academic advisors.

The performance of the student in his/her courses is evaluated by the instructor using course assessment tools such as final exams, midterms, quizzes, homework, projects, reports etc. that fulfill the course/student outcomes.

Detailed program regulations, admission, study and exams, recruitment, appeals and complaint regulations, etc.) see the link Program Regulations **(G. Program Management and Regulations (Program Regulations)-T3_ Prog Spec Link document.docx**

H. Program Quality Assurance

1. Program Quality Assurance System

Provide online link to quality assurance manual
(5.3 Quality Manual_v3.pdf)

2. Program Quality Monitoring Procedures

- The program is reviewed by EAB and industry Experts.
- The curriculum development and planning committee modifies the program basedon the recommendation of the experts.
- Each faculty member or group of faculty members will review their courses and theprogram and provide curriculum development and planning committee with his/hersuggestions.
- The curriculum development and planning committee presents its proposal for modification to Department council for approval.

3. Arrangements to Monitor Quality of Courses Taught by other Departments.

- Monitoring by Academic Follow-up Unit of CCIS.
- Reviewing faculty member course evaluation for all courses each semester.
- Reviewing student course evaluations for all courses each semester.
- Student interviews.
- Course file evaluation of the faculty members

4. Arrangements Used to Ensure the Consistency between Main Campus and Branches (including male and female sections)

- **Vice Dean Academic Affairs-** The College Vice dean for academic affairs essentially focuses on the academic and educational affairs in the college (including male and female sections). Vice dean for academic affairs is responsible for supervising the academic and educational performance in the college.

Roles in Academic affairs

- Supervising the academic and educational performance in the college.
- Supervising student cultural, social and sport activities.
- Supervising the mission of students' rights in the advising council.
- Supervising field training.
- Supervising academic advising.
- Studying and following up of student affairs.

- **The Department Chair (HOD)** is appointed by the university rector with the recommendation of dean of the college for two renewable years.
- Head of Department (HOD) is responsible and accountable for setting and advancingthe academic strategy of the Department in line with Faculty and University strategic plans and direction. HOD Chairs the Departmental Council and contribute to the overall leadership and management of the Faculty, also develop and sustain appropriate structures for management, consultation, decision-making and communication with staff and students.

- Course Conveners – Appointed by **Vice Dean Academic Affairs, Course Convenerwill be senior faculty among all teaching the same course in different section.** Course evaluation is a continuous process in which course is evaluated by facultymembers and course conveners after mid exam as well as

after final Exam.

After mid examination, faculty members of the same courses fill the Course Evaluation Form 1 and will be submitted to the course convener with learning barriersand issues along with action plan. In addition, faculty members submit Form 2 (survey form) filled by students to the Course Conveners. After receiving both the forms course conveners analyze the course results and student outcomes (SOs) and communicate to Academic Development Unit through Form 3

- Quality Unit
- Academic Follow-up Unit (AFU)

  AFU prepares a consolidated report and submit it to measurement and evaluation unit. Measurement unit prepare a report regarding student performance, student's outcome (SOs) achieved and submit it to Quality Unit.Quality unit send the report to Department. The issues raised by the Quality unit willbe discussed in department council meeting.

5. Arrangements to Apply the Institutional Regulations Governing the Educational and Research Partnerships (if any).

Career and personal development at the college and the university provide faculty with opportunities to build productive and satisfying careers while contributing to the achievementof the university's mission. The university has established a Deanship of Quality and Skills Development which plays a major role not only in organizing the workshops and seminars, but also in identifying the staff needs and setting strategies to meet those needs.

MU tenure faculty members are eligible for one semester sabbatical leave every three years or one year every five years. Applications for sabbatical leave (research plan and its budget) should be submitted to the department 4-6 months prior to the end of the academic year for approval by the department council, the college council and then by the university scientific council. Requests are granted based on a sound application, as well as availability of faculty for courses to be fully covered. Faculty members should achieve at least one piece of research during their sabbatical leave.

6. Assessment Plan for Program Learning Outcomes (PLOs), and Mechanisms of Using its Results in the Development Processes

A. Student Outcomes

The Information Technology program enables students to attain, by the time of graduation

Mapping table ;

The mapping between courses and student outcomes, shows that all outcomes are supported by at least two courses each.

(PLO Assessment Attached- PLO Assessment Report for 2021-22.pdf)

B. Curriculum

The curriculum covers the following main subject areas of information technology, below shows courses that cover significant portion of these areas.

Table 14: Curriculum covers the following main subject areas of information technology

Area	Courses (Dept., Number, and Title)
Programming	CS, CS131, Programming (1) CS, CS211, Programming (2) CS, CS231, Data Structures
Human computer interaction	IT, IT334, Human Computer Interactions
Information management	IT, IT444, Global Information Management
Networking	IT, IT321, Data Transmission and Computer Network IT, IT423, Computer Networks Lab
Web systems and technologies	IT, IT452, Web Development Using Content Management Systems IT, IT455, Advanced Web Applications Development
Selection, creation, evaluation, and administration of computer-based systems	IT, IT 421, Information Administration and Storage Technology IT, IT424, Global Information Management IT, IT 425, Enterprise Architecture and Systems Design
Integrate IT-based solutions into the user environment	IT, IT412, Systems Integration IT, IT 445, Enterprise Architecture and Systems Design IS 233, Database Management Systems
Understanding of best practices and standards	IT, IT112, Computer Fundamentals IT, IT313, Multimedia and Web Design
Creation of an effective project plan	IT, IT421, Graduation Project (1) IT, IT431, Graduation Project (2)

1. Program Evaluation Matrix

Table 15: Program Evaluation Matrix

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
Facility	Students	Survey	Mid of semester and End of Semester
Leadership	Students	Survey	End of Semester
Effectiveness of Teaching	Students	Exams and Survey	Beginning of semesters, Mid of

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
			semester and End of Semester
Assessment (Direct)	Students	Exams	Beginning of semesters, Mid of semester and End of Semester
Assessment (In Direct)	Students	Survey	Mid of semester and End of Semester
Assessment (In Direct)	Students	Survey	Mid of semester and End of Semester

Evaluation Areas/Aspects (e.g., leadership, effectiveness of teaching & assessment, learning resources, partnerships, etc.)
Evaluation Sources (students, graduates, alumni, faculty, program leaders, administrative staff, employers, independent reviewers, and others (specify)
Evaluation Methods (e.g., Surveys, interviews, visits, etc.)
Evaluation Time (e.g., beginning of semesters, end of academic year, etc.)

8. Program KPIs*

The period to achieve the target (2021-22) year.

* including KPIs required by NCAAA

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
1- Mission and Goals	KPI-P-01	NCAAA	Percentage of achieved indicators of the program operational plan objectives	Percentage of performance indicators of the operational plan objectives of the program that achieved the targeted annual level to the total number of indicators targeted for these objectives in the same year	80%	80%	80%	80%	80%	80%	83%	83%	83%	85%	85%	85%
3-Teaching and Learning	KPI-P-02	NCAAA	Students' Evaluation of quality of learning experience in the program	Average of overall rating of final year students for the quality of learning experience in the program on a five-point scale in an annual survey	3.0	3.7	3.7	4.5	4.5	4.5	4.9	3.6	4.3	4.5	3	4

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
	KPI-P-03	NCAAA	Students' evaluation of the quality of the courses	Average students overall rating for the quality of courses on a five-point scale in an annual survey	3.8	3.2	3.4	4.5	4.5	4.5	3.4	3.5	3.4	4	3.5	4
	KPI-P-04	NCAAA	Completion rate	Proportion of undergraduate students who completed the program in minimum time in each cohort	87%	92%	90%	75%	75%	75%	75%	83%	79%	90%	95%	95%
	KPI-P-05	NCAAA	First-year students retention rate	Percentage of first-year undergraduate students who continue at the program the next year to the total number of first-year students in the same year	96%	99%	98%	100 %	100%	100 %	100 %	100%	100 %	100 %	100%	100 %

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
	KPI-P-06	NCAAA	Students' performance in the professional and/or national examinations	Percentage of students or graduates who were successful in the professional and / or national examinations, or their score average and median (if any)	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 %	100%	100 %
	KPI-P-07	NCAAA	Graduates' employability and enrolment in postgraduate programs	Percentage of graduates from the program who within a year of graduation were: a. Employed	47.1 %	16.7%	31.4 %	50%	50%	50%	0%	0%	0%	50%	50%	50%
				b. enrolled in postgraduate programs during the first year of their graduation to the total number of graduates in the same year	0.0%	0.0%	0.0%	50%	50%	50%	0%	0%	0%	50%	50%	50%

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
	KPI-P-08	NCAAA	Average number of students in the class	Average number of students per class (in each teaching session/activity: lecture, small group, tutorial, laboratory or clinical session)	30.0	30.0	30.0	15	15	15	16.5	14.4	15.4	25	25	25
	KPI-P-09	NCAAA	Employers' evaluation of the program graduates proficiency	Average of overall rating of employers for the proficiency of the program graduates on a five-point scale in an annual survey	-	-	-	4	4	4	-	-	-	4	4	4
4-Students	KPI-P-10	NCAAA	Students' satisfaction with the offered services	Average of students' satisfaction rate with the various services offered by the program (restaurants, transportation, sports	3.6	2.1	2.7	4	4	4	3.5	2.6	3.1	4	3	3

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
				facilities, academic advising, ...) on a five-point scale in an annual survey												
5-Teaching Staff	KPI-P-11	NCAAA	Ratio of students to teaching staff	Ratio of the total number of students to the total number of full-time and full-time equivalent teaching staff in the program	12.1	28.6	16.9	10	10	10	12.1	28.6	16.9	15	15	15
	KPI-P-12	NCAAA	Percentage of teaching staff distribution	Percentage of teaching staff distribution based on: a. Gender	71%	29%	100%	50%	50%	50%	71%	29%	100 %	50%	50%	50%
				b. Branches	71%	29%	100%	50%	50%	50%	71%	29%	100 %	50%	50%	50%
				c. Academic Ranking Professor	0%	0%	0%	10%	10%	10%	0%	0%	0%	10%	10%	10%
				Associate Professor	27%	0%	19%	20%	20%	20%	27%	0%	19%	20%	20%	20%

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
				Assistant Professor	55%	60%	56%	40%	40%	40%	55%	60%	56%	40%	40%	40%
				Lecturer	18%	40%	25%	20%	20%	20%	18%	40%	25%	20%	20%	20%
				TA	0%	0%	0%	10%	10%	10%	0%	0%	0%	10%	10%	10%
	KPI-P-13	NCAAA	Proportion of teaching staff leaving the program	Proportion of teaching staff leaving the program annually for reasons other than age retirement to the total number of teaching staff.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	KPI-P-14	NCAAA	Percentage of publications of faculty members	Percentage of full-time faculty members who published at least one research during the year to total faculty members in the program	90.0 %	75.0%	85.0 %	70%	70%	70%	90%	75%	85%	95%	80%	90%

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
	KPI-P-15	NCAAA	Rate of published research per faculty member	The average number of refereed and/or published research per each faculty member during the year (total number of refereed and/or published research to the total number of full-time or equivalent faculty members during the year)	1.90	1.37	1.75	1.5	1.5	1.5	1.6	1	1.43	2	2	2

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
	KPI-P-16	NCAAA	Citations rate in refereed journals per faculty member	The average number of citations in refereed journals from published research per faculty member in the program (total number of citations in refereed journals from published research for full-time or equivalent faculty members to the total research published)	49.7	17.5	42.5	4	4	4	5.4	4.6	5.3	50	20	45
6-Learning Resources, Facilities, and Equipment	KPI-P-17	NCAAA	Satisfaction of beneficiaries with the learning resources	Average of beneficiaries' satisfaction rate with the adequacy and diversity of learning resources (references, journals,	4.4	4.8	4.6	5	5	5	3.9	4.1	4.0	5	5	5

Standard	Code	Source	Key Performance Indicators	Description	Actual performance			Targeted performance level			Internal reference (Internal benchmark)			New target performance level		
					Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
				databases… etc.) on a five-point scale in an annual survey.												

I. Specification Approval Data

Council / Committee	**DEPARTMENT COUNCIL**
Reference No.	**#1**
Date	**AUGUST 25, 2021**

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA T3 2020

Program Specification